

Serial No. 10/656,841
60,130-1721
03MRA0169

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows. This listing of claims will replace all prior listings.

1. (ORIGINAL) A composite leaf spring comprising:
a forward leaf spring segment comprising an arcuate member extending therefrom;
a rearward leaf spring segment of a lesser depth and a greater width than said forward leaf spring segment; and
a mounting segment intermediate said forward leaf spring segment and said rearward leaf spring segment.
2. (ORIGINAL) The composite leaf spring as recited in claim 1, wherein any cross-section taken perpendicular to the composite leaf spring defines a substantially equivalent cross-sectional area.
3. (ORIGINAL) The composite leaf spring as recited in claim 1, wherein said forward leaf spring segment, said mounting segment and said rearward leaf spring segment define a non-linear member.
4. (ORIGINAL) The composite leaf spring as recited in claim 1, further comprising a mount integral with said rearward leaf spring segment.
5. (ORIGINAL) The composite leaf spring as recited in claim 1, further comprising a mount overmolded to said rearward leaf spring segment.
6. (ORIGINAL) The composite leaf spring as recited in claim 1, wherein said rearward leaf spring segment comprises a substantially flat segment of a width greater than any other segment of said composite leaf spring.

Serial No. 10/656,841
60,130-1721
03MRA0169

7. (ORIGINAL) A suspension system comprising:
a composite leaf spring comprising a forward leaf spring segment defining an arcuate segment, a rearward leaf spring segment, and a mounting segment intermediate said forward leaf spring segment and said rearward leaf spring segment; and
a rear attachment system comprising a shear damper mounted to said rearward leaf spring segment.

8. (ORIGINAL) The suspension system as recited in claim 7, wherein said shear damper is mounted directly to said rearward leaf spring segment.

9. (ORIGINAL) The suspension system as recited in claim 7, further comprising a mount overmolded to said rearward leaf spring segment, said shear damper mounted directly to said mount.

10. (ORIGINAL) The suspension system as recited in claim 7, further comprising a substantially rectilinear mount to receive said rearward leaf spring segment.

11. (ORIGINAL) The suspension system as recited in claim 10, further comprising a resilient bumper between said mount and said rearward leaf spring segment.

12. (ORIGINAL) The suspension system as recited in claim 7, further comprising a substantially rectilinear mount to receive said rearward leaf spring segment, said rearward leaf spring segment substantially free to longitudinally slide within said substantially rectilinear mount.

Serial No. 10/656,841
60,130-1721
03MRA0169

13. (ORIGINAL) A method of mounting a composite leaf spring to a rear attachment system mounted to a vehicle mainframe comprising the steps of:

- (1) forming a rearward leaf spring segment as an end of a composite leaf spring;
- (2) attaching a shear damper between the rearward leaf spring segment and the vehicle mainframe such that the rearward leaf spring segment is longitudinally movable parallel to the vehicle mainframe as the shear damper moves in shear.

14. (ORIGINAL) A method as recited in claim 13, wherein said step (2) comprises fixing the shear damper to the vehicle mainframe and a mount overmolded to the rearward leaf spring segment.

15. (ORIGINAL) A method of mounting a composite leaf spring to a rear attachment system mounted to a vehicle mainframe comprising the steps of:

- (1) forming a rearward leaf spring segment as an end of a composite leaf spring;
- (2) slidably retaining the rearward leaf spring segment within a mount; and
- (3) attaching a shear damper between the mount and the vehicle mainframe such that the rearward leaf spring segment is longitudinally movable parallel to the vehicle mainframe as the shear damper moves in shear and the rearward leaf spring segment slides within the mount.

16. (NEW) The composite leaf spring as recited in claim 1, wherein said forward leaf spring segment, said rearward leaf spring segment, and said mounting segment are solid in cross-section.

17. (NEW) The composite leaf spring as recited in claim 1, wherein said mounting segment includes a tapering width combined with an expanding depth.

Serial No. 10/656,841
60,130-1721
03MRA0169

18. (NEW) The composite leaf spring as recited in claim 1, wherein said mounting segment width is constantly decreasing as a mount segment depth is consistently increasing.

19. (NEW) The composite leaf spring as recited in claim 1, wherein said mounting segment provides a unique cross-sectional shape corresponding to a longitudinal length of the mount segment.

20. (NEW) The suspension system as recited in claim 7, wherein said shear damper is mounted to a bracket mounted to a longitudinal mainframe.

21. (NEW) The suspension system as recited in claim 7, wherein said shear damper is mounted to an upper surface of said rearward leaf spring segment.

22. (NEW) The suspension system as recited in claim 7, wherein said shear damper is generally rectilinear in shape.